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EDISON ELECTRIC INSTITUTE

February 28, 2011

Ms. Marlene H. Dortch
Secretary
Federal Communications Commission
445 12th Street, S.W.
Washington, D.C. 20554

Re: **Notice of Ex Parte Communication:**
WC Docket No. 07-245 (Implementation of Section 224 of the Act); and
GN Docket No. 09-51 (A National Broadband Plan for Our Future)

Dear Ms. Dortch:

This is to notify you that pursuant to Section 1.1206 of the Commission's Rules that Aryeh Fishman and John Caldwell from the Edison Electric Institute met on February 28, 2011 with Christi Shewman of the Competition Policy Division of the Wireline Competition Bureau, Albert Lewis, Division Chief of the Pricing Policy Division of the Wireline Competition Bureau, and Richard Kwiatkowski and Marvin Sacks of the Pricing Policy Division of the Wireline Competition Bureau, in connection with the above-referenced proceedings.

During the meeting, the parties discussed the economic implications of proposed rules for pole attachments in the above-referenced proceeding. Mr. Caldwell's presentation, attached with this letter, is based on the testimony presented by Jonathon Orszag and Allen Shampine, and provided a summary of the economic analysis performed by Kaustuv Chakrabarti (filed with the Commission on October 4, 2010, and December 14, 2010, respectively).

If there are any questions concerning this matter, please let me know.

Respectfully submitted,

/s/ Aryeh B. Fishman
Aryeh B. Fishman

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Attachment

cc: Christi Shewman, Albert Lewis, Richard Kwiatkowski, Marvin Sacks

FCC Proposed Pole Attachment Rules
Assessment of Economic Impacts

Presented by
John Caldwell
Director of Economics
Edison Electric Institute

February 28, 2011

Based on testimony presented by Jonathan Orszag and Allan Shampine, and a summary of the economic analysis performed by Kaustuv Chakrabarti, both at the request of EEI and its member companies.

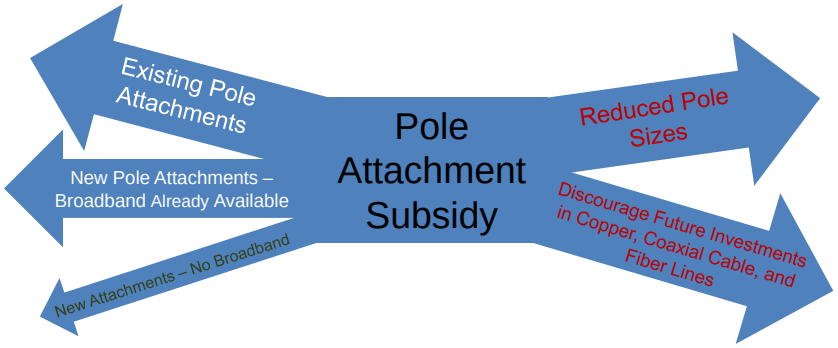
Economic Consequences of Proposed Pole Attachment Rate Methodologies

- Lowering the regulated rate may reduce economic efficiency in at least two ways:
  1. It will decrease incentives to invest in access infrastructure
  2. It will increase economic distortions in the subsidizing sector
- Providing service to rural customers using poles is expensive (i.e., large fixed costs for installation, and ongoing costs for maintenance). If multiple firms are using the poles, it is not economically appropriate for some of the users to bear none of these costs.

Incentives for Future Infrastructure Investment

- Extra space for attachments on utility poles would not be present in the absence of demand from other attachers (i.e., ILECs, through joint-use agreements).
- The importance of financial incentives to utilities has been well documented: reducing or eliminating compensation results in underinvestment.
- A policy which allows third-parties to be "free riders" on utility and ILEC investments may discourage future investment in access infrastructure
  - By utilities and ILECS who are under-compensated for existing investments
  - By providers of other inputs (e.g., copper, coaxial cable, fiber lines) who consider the risk of a similar policy applied to their own investments

Collateral Impacts of Pole Attachment Subsidy



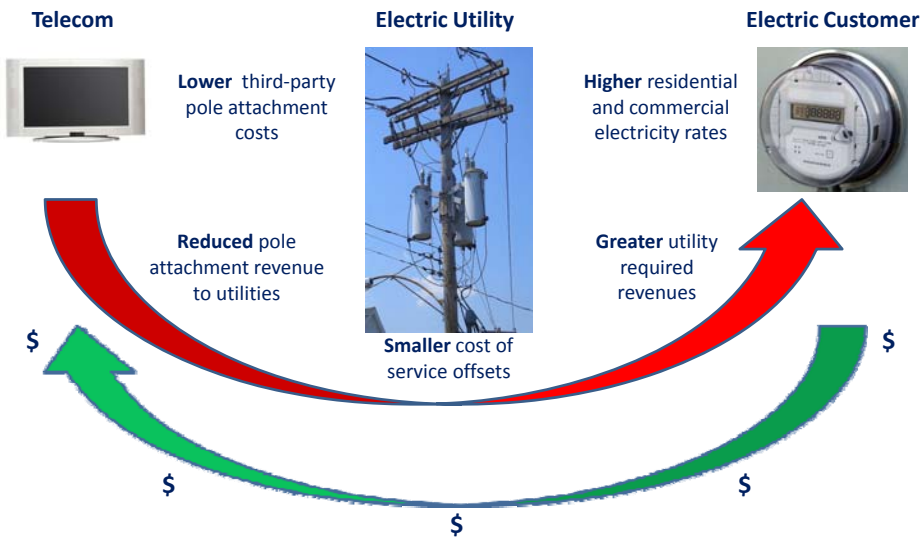
Beneficiaries

Consequences

Collateral Impacts of the FCC Proposal for Promoting Broadband Deployment

- It constitutes an untargeted subsidy, and, as such, will be wasteful.
- It will result in the pole owners' customers subsidizing broadband service providers.
- Its effects on broadband deployment will be small, and may even have negative consequences
  - It will have an effect on deployment for a small percentage of all poles nationally
  - It may discourage development of competing technologies
  - Pole attachment costs make up less than 1% of costs for cable companies
  - In spite of pole attachment rate increases, there has been no significant decline in broadband deployment

Telecoms could benefit at electric customer expense

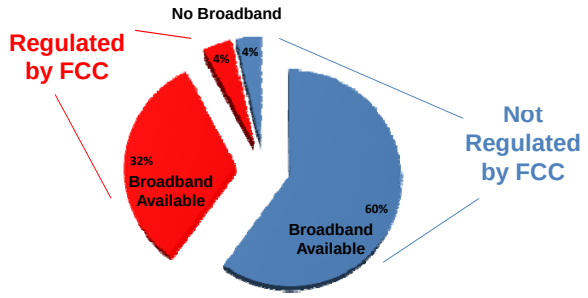


Reduced pole attachment revenue must be recovered dollar for dollar through higher electricity rates – lower costs for telecom customers results in higher rates for electricity customers

What Impact Will FCC Pole Attachment Rate Changes Have on Broadband Deployment?

FCC Internet Access Services: Status as of June 30, 2009

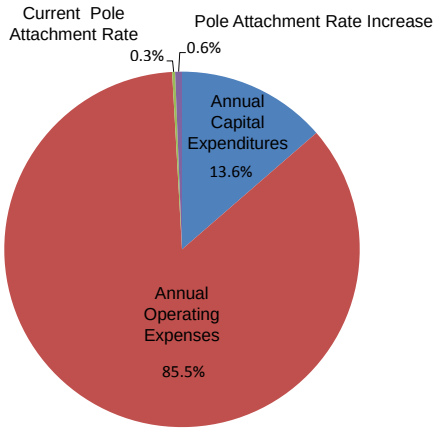
- **99%** of census tracts have at least one internet access provider >= 200 kb/s
- **96%** of homes with cable TV access also have access to cable modem service
- **85%** of homes with ILEC telephone service also have access to DSL



Based on data from National Broadband Plan and FCC Sixth Broadband Deployment Report

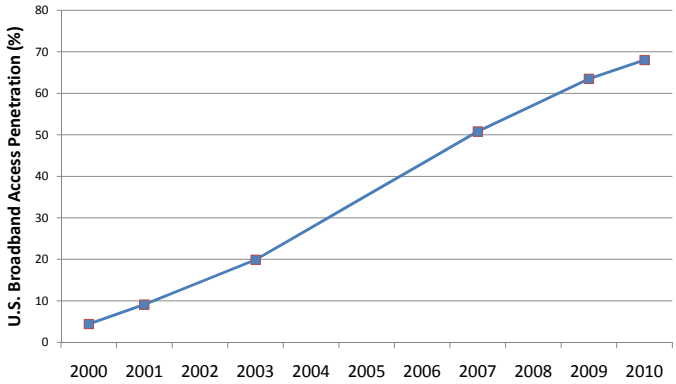
Pole Attachment Rates

What Are Their Share of Cable Expenditures?



Sources
Capital Expenditures: *Broadband in America*, Atkinson and Schultz, 2009
Operating Expenses: *Statistical Abstract of the United States*, 2011 (for year 2008)
Pole Attachment Costs: NCTA Comments, Declaration of Dr. Michael Pelcovits, 2009

U.S. Broadband Penetration Rate Growth



Sources: Historical data from OECD Broadband Portal ; 2010 data point from U.S Dept. of Commerce National Telecommunications and Information Administration

Section 224 of the Telecommunications Act

Telecommunications Providers

- Cost of providing usable space apportioned "according to the percentage of usable space required for each entity" (e)(3)
- Cost of unusable space apportioned in such a manner that non-utility attacher pays 2/3 of what would have been an equal share of costs (e)(2)

Cable Providers

- Cost of providing usable space is not less than the "additional costs of providing pole attachments", nor more than an allocation of all operating expenses and capital costs attributable to the entire pole on the basis of the percentage of the total usable space utilized (d)(1)

Current Attachment Rates

- Cable Formula Rate:

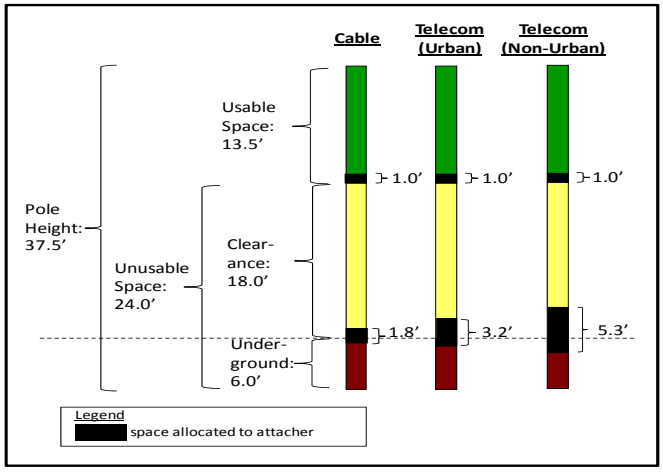
$$\text{Maximum Rate per Pole} = \frac{\text{Space Occupied}}{\text{Usable Space}} \times \frac{\text{Net Pole Investment}}{\text{Total Number of Poles}} \times 0.85 \times \text{Carrying Charge Rate}$$

- Telecom Formula:

$$\text{Maximum Rate} = \left[\frac{\left(\frac{\text{Space}}{\text{Occupied}}\right) + \left(\frac{2}{3} \times \frac{\text{Unusable Space}}{\text{No. of Attaching Entities}}\right)}{\text{Pole Height}}\right] \times \frac{\text{Net Pole Investment}}{\text{Number of Poles}} \times \left[\text{Carrying Charge Rate}\right] \times 0.85$$

Reprinted (with slight modifications) from a presentation by The Brattle Group: "FCC Pole Attachment Rates: Rebutting Some of the Presumptions", March 2003.

Space Allocated to Attacher Under Existing Rent Formulae



Pole Space Apportionment Under Existing Attachment Formulas

	# Attachers	Usable (ft.)	Unusable (ft.)	Total (ft.)
Pole Profile		13.5	24.0	37.5
Apportionment of Pole Space				
Cable Rate		1.0	24*(1/13.5)=1.8	1.0+1.8=2.8
% of Space Apportioned		**7.4%**	**7.4%**	**7.4%**
Telecom Rate (Non-Urbanized)	3.0	1.0	(24*2/3)/3=5.3	1.0+5.3=6.3
% of Space Apportioned		**7.4%**	**22.2%**	**16.9%**
Telecom Rate (Urbanized)	5.0	1.0	(24*2/3)/5=3.2	1.0+3.2=4.2
% of Space Apportioned		**7.4%**	**13.3%**	**11.2%**

37.5 Foot Pole: Electric Utility Safety Space

		Used						Unused		Attachers' Share 5/		
Attach-ments	Pole Height 1/	Electric 2/	ILEC	Att. A	Att. B	Att. C	Total Used	Unused 3/	Attacher Share of Unused 4/	Att. A	Att. B	Att. C
3	37.5	8.7	3.0	1.0			12.7	24.8	8.3	9.3		
4	40.0	8.7	3.0	1.0	1.0		13.7	26.3	6.6	7.6	7.6	
5	40.0	8.7	3.0	1.0	1.0	1.0	14.7	25.3	5.1	6.1	6.1	6.1
		Used						Unused		Attachers' Share		
Attach-ments	Pole Height	Electric	ILEC	Att. A	Att. B	Att. C	Total Used	Unused	Attacher Share of Unused	Att. A	Att. B	Att. C
3	37.5	23%	8%	3%			34%	66%	22%	25%		
4	40.0	22%	8%	3%	3%		34%	66%	16%	19%	19%	
5	40.0	22%	8%	3%	3%	3%	37%	63%	13%	15%	15%	15%

* values in first table (other than first column) shown in feet; those in second table shown as % of pole height
1/ More than 13.5' of usable space is required when >= 4 attachments, requiring 40' pole
2/ 5.33' for electric utility attachments plus 3.33' for safety space
3/ Pole height minus space used
4/ Unused space divided by number of attachments
5/ Space used by attachment plus share of unused space

37.5 Foot Pole: Unusable Safety Space

		Used						Unused		Attachers' Share		
Attach-ments	Pole Height 1/	Electric 2/	ILEC	Att. A	Att. B	Att. C	Total Used	Unused 3/	Attacher Share of Unused 4/	Att. A	Att. B	Att. C
3	37.5	5.3	3.0	1.0			9.3	28.2	9.4	10.4		
4	40.0	5.3	3.0	1.0	1.0		10.3	29.7	7.4	8.4	8.4	
5	40.0	5.3	3.0	1.0	1.0	1.0	11.3	28.7	5.7	6.7	6.7	6.7
		Used						Unused		Attachers' Share		
Attach-ments	Pole Height	Electric	ILEC	Att. A	Att. B	Att. C	Total Used	Unused	Attacher Share of Unused	Att. A	Att. B	Att. C
3	37.5	14%	8%	3%			25%	75%	25%	28%		
4	40.0	13%	8%	3%	3%		26%	74%	19%	21%	21%	
5	40.0	13%	8%	3%	3%	3%	28%	72%	14%	17%	17%	17%

* values in first table (other than first column) shown in feet; those in second table shown as % of pole height
1/ More than 13.5' of usable space is required when >= 4 attachments, requiring 40' pole
2/ 5.33' for electric utility attachments
3/ Pole height minus space used
4/ Unused space divided by number of attachments
5/ Space used by attachment plus share of unused space

Number of Attaching Entities per Joint Use Pole

Pole Height	APS	GA Power	Oncor	Avg.
30'	3.0	2.6	2.6	2.7
35'	3.0	2.6	2.9	2.8
40'	3.8	2.7	2.9	3.1
45'	3.8	2.8	2.8	3.1
Average				**3.0**

Note: Averages include electric utility as one of the attachers. Data based pole inventory data collected in 2010.

Estimation of Maintenance Costs

- **FCC Rental Formula:**

$$\text{Maintenance Element} = \frac{\text{Account 593 (Maintenance of Overhead Lines)}}{\text{Investment in Accounts 364 (Poles, Towers, and Fixtures), 365 (Overhead Conductors and Devices), \& 369 (Services)} - \text{Depreciation Related to Accounts 364, 365, \& 369} - \text{Accumulated Deferred Income Taxes Related to Accounts 364, 365, \& 369}}$$

- **Patricia Kravtin Critique of Formula**
  - Utility maintenance costs for ILECs are 40%-45% of that predicted in the formula
  - The formula overestimate is apparently caused by inclusion of non-pole items with higher per-unit maintenance costs
- **Rebuttal**
  - ILECs in joint-use agreements spend considerably less on pole maintenance than utilities
  - Kravtin bases her argument on a comparison of maintenance-to-gross (rather than net) investment ratios between ILECs and utilities
  - When maintenance-to-net investment ratios (as in the formula) are compared, utility maintenance costs for ILECs are closely estimated by the formula

Estimation of Administration Costs

- **FCC Rental Formula:**

$$\text{Administrative Element} = \frac{\text{Accounts 920-935 (General and Administrative)}}{\text{Investment in Account 101 (Gross Plant)} - \text{Depreciation Related to Account 101} - \text{Accumulated Deferred Income Taxes Related to Account 101}}$$

- **Kravtin's Proposed Approach:**

$$\text{Described Adjustment Factor} = \frac{\text{Accounts 593 (Maintenance of Overhead Lines)}}{\text{Distribution Operations (581-589)} + \text{Distribution Maintenance (590-598)} + \text{Customer Accounts (901-905)} + \text{Customer Service and Informational (907-910)} + \text{Sales (911-916)}}$$

- But this approach increases the size of the estimate!

	Alabama Power	NSTAR	Central Hudson	FP&L	Georgia Power	Gulf Power	Miss. Power	Dominion
Current Formula	3.9%	6.0%	14.8%	3.3%	3.9%	6.9%	7.4%	4.4%
Proposed Formula	21.8%	10.3%	20.9%	18.6%	15.4%	20.3%	11.5%	41.9%

- Kravtin's sample calculation (Appendix C in her testimony) conflicts with her proposed approach.

What is the Appropriate Rate-of-Return to Use in Computing Carrying Charges?

- **Kravtin Claim:** IRS interest rate (generally set at federal short-term rate + 3%) more accurately represents opportunity costs of capital for pole-owning utilities than FCC default charge
- **Reality:** A utility's cost of capital is based on:

$$\text{Weighted Average Cost of Capital} = w_e(\text{Cost of Equity}) + w_d(\text{Cost of Debt}) + w_p(\text{Cost of Preferred Stock})$$

with each component firm-specific or industry-specific

- In past decisions, the FCC has recognized that the IRS rate is not reflective of a utility's actual cost of capital and rate-of-return, and that either an actual utility-specific rate should be calculated, or the FCC default rate should be used

Do Make-Ready Charges Fully Compensate Utilities for Pole Attachment Costs?

- Attachers pay utilities for any direct costs associated with providing space for pole attachments, in the form of "make-ready" charges
  - Rearrangement of facilities on existing poles
  - Replacement of existing pole for a larger one
- Pole replacement to accommodate new attachers is uncommon

Oncor Make-Ready Data

	2008	2009
All Make Ready (Rearrangement or Change-Out)		
Poles Permitted	27,876	18,042
Poles Requiring Make-Ready of Any Kind	12,016	10,838
% of Poles Permitted	43%	60%
Change-Outs Only		
Change Out of Pole	141	34
Addition of Midspan Pole	99	49
Total	240	83
% of Poles Permitted	0.9%	0.5%

- The charges paid for rearrangement of facilities do not compensate the utility for the annual, recurring costs of servicing the attachment

Thank You!

Questions?
Contact John Caldwell at jcaldwell@eei.org
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